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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/600,132 | 08/14/2000 | GERARD LANG | 05725.0623 | 8931 |

7590 02/14/2003

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WASHINGTON, DC 20005

EXAMINER

ELHILO, EISA B

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1751

16

DATE MAILED: 02/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/600,132

Applicant(s)

LANG ET AL.

Examiner

Eisa B Elhilo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

- 1 This action is responsive to the appeal brief filed on 12/11/2002.
- 2 Upon further review and consideration the prosecution is reopened. Ex parte prosecution is resumed. Pending claims are 23-62.

NEW GROUND OF REJECTION

Claim Rejections - 35 USC § 103

- 3 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dias (WO 97/24107) in view of Aaslyng (WO 97/19998).

Dias (WO' 107) teaches a hair dyeing composition comprising from about 0.001% to about 5% of enzymes such as peroxidase (see page 39, 2nd paragraph), alkaline agents of basic amino acids such as L-alanine, lysine, oxylysine and histidine, alkanolamines such as dimethylaminoethanol and mono or diethanolamines, potassium hydroxide and calcium hydroxide as claimed (see page 33 2nd paragraph), from 0.01% to 15% of oxidation dyes such as aromatic diamines, aminophenols and their derivatives (see page 16, whole page), from 1% to 6% of couplers such as 1,3-diamino-benzene or its derivatives (see page 27, third paragraph), direct dyes such as anthraquinone dyes (see page 29), acid salts such as acetate, tartarate and lactate (see page 33, 1st paragraph), solvents such as water and lower alcohols such as ethanol, butanol and propylene glycol (see page 38, 2nd paragraph), surfactants such as anionic, cationic,

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nonionic and amphoteric surfactants (see page 40, 3rd paragraph). The composition may be in solid or liquid form (see page 34, 2nd paragraph) and has a pH in the range of 2 to about 12 which within the claimed range (see page 32, 2nd paragraph). Dias also teaches a method and kit for dyeing hair using the dyeing composition as described above (see page 5, last paragraph, pages 58-59, claims 17 and 19-21).

The instant claims differ from the reference by reciting a hair dyeing composition comprising a laccase enzyme as an oxidizing agent. However, the primary reference teaches a peroxidase enzyme and other suitable enzymes which are used in the dyeing composition (see page 38, 2nd paragraph) as an oxidizing agents.

Aaslyng (WO' 998) in analogous art of hair dyeing composition teaches a composition comprising laccase enzyme as an oxidizing agent which derived from plant, animal, fungal, bacteria or microbiological origins (see page 5, lines 5-34). The quantity of the laccase enzyme in the dyeing composition can be calculated using the unit (LACU) which is the amount of the enzyme that catalyses the conversion of 1.0 micromole syringaldazin per minute at these conditions (see page 10, line 38 and page 11, lines 1-2).

Therefore, according to the teaching of the secondary reference, one having ordinary skill in the art would be motivated to modify the primary reference by adding the laccase enzyme as taught by Aaslyng to make such a dyeing composition. Such modification would be obvious because the primary reference teaches that one or more enzymes may be used in the dyeing composition (see page 39, 2nd paragraph) as an oxidizing agents and, thus, a person of ordinary skill in the art would be motivated to incorporate the laccase enzyme in the dyeing composition with a reasonable expectation of success because all the enzymes in dyeing composition are

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known to provide hydrogen peroxide and, thus, are known to be oxidizing agents. Furthermore, laccase enzyme ^{are} well known in the dyeing art to be useful as an oxidizing agent.

Response to Applicant's Arguments

4 Applicant's arguments filed 12/11/2002 have been fully considered but they are rendered moot in view of new ground of rejection.

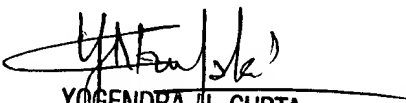
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B Elhilo whose telephone number is (703) 305-0217. The examiner can normally be reached on M - F (7:30-5:00) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (703) 308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Elhilo
February 10, 2003


YOGENDRA H. GUPTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700